

Notice of Allowability

Application No.

10/675,391

Examiner

Christopher M. Kalivoda

Applicant(s)

MINO ET AL.

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Response to Election/Restriction received 07/06/05.
2. ☒ The allowed claim(s) is/are 1, 4, 7, 10, 13 and 16.
3. ☒ The drawings filed on 30 September 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 01/26/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 081705
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

KAVEH KIANNI
PRIMARY EXAMINER

KAVEH KIANNI
PRIMARY EXAMINER

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

In accordance with discussions made in a telephone interview with the inventor's representative, Dana Tangren on August 17, 2005, the following changes have been made:

In claim 10, last line, delete -- type--.

Reasons for Allowance

This application is in condition for allowance except for the presence of claims 2, 3, 5, 6, 8, 9, 11, 12, 14, 15 and 17-36 to species non-elected without traverse. Accordingly, claims 2, 3, 5, 6, 8, 9, 11, 12, 14, 15 and 17-36 have been cancelled.

Claims 1, 4, 7, 10 13 and 16 are allowed for the following reasons:

The instant application is deemed to be directed to a non-obvious improvement over the invention described in Japanese Publication 08-036195 to Masabumi et al.

Independent claim 1 is allowed because the prior art of record, taken alone or in combination, fails to disclose or render obvious electrical digital switches, each of which is connected to one of said two-port optical switches or said gate optical switches for

interrupting a driving current from one of said driving power supply circuits in combination with the rest of the limitations of the base claim.

Claims 4, 7, 10 and 13 depend on claim 1 and therefore they are also allowed.

Masabumi et al. teach a $1 \times N$ optical switch comprising a two port optical switch, a switch section including one or more two-port optical switches connected in cascade, a plurality of gate optical switches and plurality of switch driving power supply circuits and a gate driving power supply circuit. However, the reference is silent with respect to the electrical digital switches as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,892,864 to Stoll et al. teaches a $1 \times N$ optical switch formed by cascading two-port switches. There are gate switches at the outputs and driving circuits. U.S. Patent 6,330,379 to Hendriksen and U.S. Patent 6,389,191 to Borreman et al. teach a $1 \times N$ optical switch formed by cascading two-port optical switches and using gates.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Kalivoda whose telephone number is (571) 272-2476. The examiner can normally be reached on Monday - Friday (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cmk
08/17/05

KAVEH KIANNI
PRIMARY EXAMINER

